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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,211

02/11/2004

Chen-Feng Wu

0941-0912P

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06/01/2004

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EXAMINER

POKER, JENNIFER A

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,211

Applicant(s)

WU ET AL.

Examiner

Jennifer A. Poker

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2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

General Status

1. This is a first action on the merits of application filed on February 11, 2004. Claims 1-11 are pending and are being examined.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "first engaging portion" and "the second engaging portion" in claims 8-10; the "protruding portion" and "a matching recessed portion" in claims 9 and 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the "first engaging portion" and "the second engaging portion" as claimed in claims 8-10; the "protruding portion" and "a matching recessed portion" as claimed in claims 9 and 10 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed

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invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 3 is objected to because applicant recites the limitation "the insulating cover". There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention:

7. Claims 3 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, applicant states, "the density of the windings on the second and fourth hollow portions exceeds that on the first and third..." The term, "that" is indeterminate. It is respectfully requested that the term be replaced by the nouns it refers to.

Regarding claim 7, applicant recites the limitation "the insulating cover". There is insufficient antecedent basis for this limitation in the claim. Examiner believes that claim 7 should have been dependent upon claim 6 because an insulating cover was introduced in claim 6. Correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,847,518 to Ishiwaki in view of Applicant's Own Admitted Prior Art.

Regarding claims 1, 4, and 11, Ishiwaki discloses a transformer comprising:

- (1) two core portions with legs which pass through the hollow portions of the bobbins (abstract; figures 3-5);
- (2) first and second bobbins (figures 3-5; abstract);
- (3) hollow portion openings located on both sides of the first and second bobbins wherein the core passes through (figures 3-5);
- (4) first and second primary coils (1, 2) located at one hollow end of respective first and second bobbins (figure 3);
- (5) first and second secondary coils (3, 4) located at a second hollow end of respective first and second bobbins (figure 3).

Ishiwaki discloses the claimed invention except for the core surrounding the bobbins.

Applicant illustrates in prior art (figure 1) that a core has been known in the art to surround a bobbin for the purposes of providing a magnetic circuit.

One skilled in the art, at the time the invention was made would have found it obvious to combine the teachings of Ishiwaki with the teachings of the Applicant's Own Admitted Prior Art

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and utilize a core that surrounded as well as passed through the bobbins for the purposes of providing a magnetic circuit.

Regarding claim 2, Ishiwaki further illustrates that the first and second bobbins are relatively parallel to one another (figures 3-5).

Regarding claim 3, Ishiwaki further illustrates that the density of the secondary coils (3, 4), which occupy one end of the hollow portion of the first and second bobbins, is greater than the density of the primary coils (11, 12), which occupies another end of the first and second bobbins (figures 3, 8).

Regarding claim 5, Ishiwaki further discloses a flange (8) (a protruding rim) on both first and second bobbins, which, as seen in figure 3, separates the hollow portions and separates the primary and secondary coils of each bobbin (figure 3; column 6, lines 42-43).

Regarding claim 6, Ishiwaki further discloses the use of an insulating casing (20) (figure 13; column 7, lines 62-63).

Regarding claim 8, Ishiwaki further illustrates in figures 3-5 that the first bobbin comprises end portions that engage with end portions of the second bobbins.

Regarding claims 9 and 10, Ishiwaki in view of Applicant's Own Admitted Prior Art discloses the claimed invention except for the specific engagement of the engaging portions (recess and protrusion). Ishiwaki does illustrate the engaging portions are connected. It would have been obvious to one having ordinary skill in the art, at the time the invention was made to utilize any form of connection since applicant has not disclosed that the recesses and protrusions solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any means of connection.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 571-272-1997. The examiner can normally be reached on 5:30-4:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jap
May 25, 2004


ELVIN ENAD
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5/27/04